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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/411,070	10/04/1999	ROYCE E. SLICK	36J.P229	7819

5514 7590 12/06/2004

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NEW YORK, NY 10112

EXAMINER
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STULBERGER, CAS P

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/411,070	Applicant(s) SLICK ET AL.	
	Examiner Cas Stulberger	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-104 and 122-140 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-104 and 122-140 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to communications: application, filed 10/04/99; amendment filed 07/12/2004.
2. Claims 1-104, and 122-140 are pending in the case. Claims 1, 2, 13, 16, 17, 29, 32, 33, 45, 48, 49, 61, 64, 65, 76, 79, 80, 92, 95, 96, 122, 125, 126, and 138 are independent claims.

### ***Response to Amendment***

3. Applicant argues that Slavin teaches double encryption; however, Slavin does not teach that the first and second private keys are in possession of separate entities, namely the intended image output device and the intended recipient of the image. Slavin however meets the limitations of the claims which state twice encrypting or twice decrypting. The claims do not specify that the twice encrypting and decrypting be done by different entities. The claims only state that the two private keys are possibly held by different entities.

In view of the rejections and response to arguments above, the prior art rejections are maintained. The grounds of rejection as set forth in the previous office action is reproduced below.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 16, 32, 48, 64, 79, 95, and 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,633,932 to Davis, and further in view of U.S. Patent No 5,956,407 to Slavin.

6. In regards to claims 1, 16, 32, 48, 64, 79, 95, and 126, Davis discloses a system including a sending node, a printing node, and a communication link coupling these nodes together in a network fashion. The sending node has access to the public key of the printing node and uses this public key to encrypt a header and a document before transmission to the printing node over the communication link (Davis: Abstract). This meets the limitation of “encrypting the data using a first key, the first key being a public key of a first private key/public key pair, a private key of the first private key/public key pair being primarily in the sole possession of the intended image output device; and a transmitting step of transmitting the data to the intended image output device.” Davis however does not disclose “encrypting the data using a second key, the second key being a public key of a second private key/public key pair, a private key of the second private key/public key pair being primarily in the sole possession of the intended recipient of the image.”

Slavin discloses a message is encrypted using a first public key encryption system to generate an intermediate encrypted message, which is then encrypted again using a second public key encryption system (Slavin: column 13, lines 23-37). This meets the limitation of “encrypting the data using a second key, the second key being a public key of a second private key/public key pair, a private key of the second private key/public key pair being primarily in the sole possession of the intended recipient of the image.”

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method encrypting a message as disclosed by Davis with the method of doubly encrypting the messages with two different encryption keys as disclosed by Slavin so that only the receiver may decode the encoded message (Slavin: column 3, lines 37).

7. Claims 2-7, 10-13, 17-24, 27-29, 33-38, 42-45, 49-55, 59-61, 65-70, 74-76, 80-86, 90-92, 96-101, 122, 126-132, and 136-138 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,378,070 B1 to Chan et al., and further in view of U.S. Patent No. 5,956,407 to Slavin.

8. In regards to claims 2-7, 10-13, 17-24, 27-29, 33-38, 42-45, 49-55, 59-61, 65-70, 74-76, 80-86, 90-92, 96-101, 122, 126-132, and 136-138, Chan discloses when the user specifies that a document is to be printed, a special print job is created in which the document is encrypted using a session key. The session key is then encrypted using the intended recipient's public key. Then the encrypted session key, the encrypted document is transmitted to a print server where the print job is held (Chan: Abstract). The session key meets the limitation of "a first encrypting step of encrypting the data using a first key." The recipient's public key meets the limitation of "the third key being a public key of a second private key/public key pair, a private key of the second private key/public key pair being primarily in the sole possession of the intended recipient of the image; and a transmitting step of transmitting the encrypted data and the twice-encrypted first key to the intended image output device." Chan however does not disclose "the second key

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being a public key of a first private/public key pair, a private key of the first private key/public key pair being primarily in the sole possession of the intended image output device.”

Slavin discloses a message is encrypted using a first public key encryption system to generate an intermediate encrypted message, which is then encrypted again using a second public key encryption system (Slavin: column 13, lines 23-37). . This meets the limitation of “the second key being a public key of a first private/public key pair, a private key of the first private key/public key pair being primarily in the sole possession of the intended image output device.”

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method encrypting a symmetric encryption key as disclosed by Chan with the method of doubly encryption as disclose by Slavin only the receiver may decode the encoded message (Slavin: column 3, lines 37).

9. In regards to claims 3, 34, 66, and 97, Chan discloses a random number is generated to enact the encryption. The random number constitutes a session key (Chan: column 6, lines 23-26). This meets the limitation of “wherein the first key is randomly generated.”

10. In regards to claims 10, 24, Chan discloses using a message digest function such as the Secure Hash Algorithm, MD5, CAST, or IDEA (Chan: column 6, lines 14-35)..

11. In regards to claims 23, 55, 86, and 132, Chan discloses a smart card which decrypts the session key and the private key is stored on the smart card and never needs to leave the smart card (Chan: column 7, lines 20-54)

12. Claims 8-10, 14-15, 24-26, 30-31, 29-41, 46-47, 56-58, 62-63, 71-73, 77-78, 87-89, 93-94, 102-104, 123-124, 133-135 and 139-140 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,378,070 B1 to Chan et al. in view of Slavin as applied to claims 2-7, 10-13, 17-24, 27-29, 33-38, 42-45, 49-55, 59-61, 65-70, 74-76, 80-86, 90-92, 96-101, 122, 126-132, and 136-138 above, and further in view of U.S. Patent No. 6,243,466 B1 to Young et al.

In regards to claims 2-7, 10, 13, 17-22, 24, 29, 33-38, 45, 49-54, 61, 65-70, 76, 80-85, 92, 96-101, 122, 126-131, and 138 Chan does not disclose sending the header through email. Young discloses sending a certified piece of mail. The packet sent consists of a header indicating the certified email, the encryption of the email under the sender's own certified public key, other information, and is signed using the sender's own private key (Young: column 8, lines 47-67). Signing with the sender's private key meets the limitation of "information related to the identity of a person" since only the sender's public key can decrypt the signature. This also meets the limitation of "transmitting the header by email."

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system of using email as disclosed by Young with the method of creating a hash and encryption as disclosed by Chan in order to provide a very high level of security (Young: Abstract).

### ***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cas Stulberger whose telephone number is (571) 272-3810. The examiner can normally be reached on Monday - Friday, 9:00A.M. - 6:00P.M.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3810. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CS

CS  
November 26, 2004

  
THOMAS R. PEESO  
PRIMARY EXAMINER